# AUTHOR INDEX

(D) Denotes Demonstration (T) Title only


ALBUS Klaus & WOLF Werner Early post-natal development of neuronal function in the kitten's visual cortex: a laminar analysis. 153

ALLEN D.G., EISNER D.A., NIEMAN C.J. & ORCHARD C.H. The effect of exposure to Na-free solutions on post-rest contractions of ferret ventricular muscle. 53*P*

ALVARADO F. & BROT-LAROCHE E. Dual mechanisms for intestinal D-glucose and sodium cotransport in brush-border membrane vesicles from guinea-pig jejunum. 45*P*

ANDREWS P.L.R. & WOOD K.L. The effects of chemical and mechanical stimuli applied to the gastric antral mucosa on corpus motility in the anaesthetized ferret. 63*P*

ASHTON J., BODDY A. & DONALDSON I.M.L. Interactions, in cat Area 17, between visual and orbital proprioceptive signals. 19*P*

ASHWORTH M., POLLARD M. & RUTISHAUSER Sigrid C.B. Hepatic extraction of amiloride in the guinea-pig: its inhibition by choline. 36*P*

ATWATER Illani, GONCALVES A., HERCHUELZ A., LEBRUN P., MALAISSE W.J., ROJAS E. & SCOTT Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

AYLING J. Hilary, CURRIE S., ELLIS F.R., HALSALL P. Jane, HAY Edwina & ELLIS Ruth The influence of surface cooling on body temperature and heat production in patients susceptible to malignant hyperpyrexia. 34*P*

BAILLIE P. & MACPHAIL Moira Rate of food ingestion by lactating rats. 58*P*

BALLANTYNE D. & RICHTER D.W. Post-synaptic inhibition of bulbar inspiratory neurones in the cat. 67

BALLARD H.J., COTTERRELL D. & KARIM F. Release of adenosine into blood from contracting skeletal muscles in dogs. 78*P*

BANKS R.W. On the attachment of elastic fibres in cat tenuissimus muscle spindles. 16*P*

BARKER D. & STACEY M.J. Presynaptic features of cat intrafusal motor innervation. 15*P*

BARKER S.J., CASTRO K., HOWE A. & PACK R.J. Abdominal vagal paraganglia in the rat: hypertrophic response to chronic hypoxia. 74*P*

BAYLOR S.M., CHANDLER W.K. & MARSHALL M.W. Calcium release and sarcoplasmic reticulum membrane potential in frog skeletal muscle fibres. 209

BECHEM M. & POTT L. K-channels activated by loss of intracellular ATP in guinea-pig atrial cardioballs. 50*P*

BENNETT T. & GARDINER S.M. Control of blood pressure during fluid deprivation in rats (Brattlebro strain) with a congenital inability to synthesize vasopressin. 60*P*

BERGMAN C. & BERGMAN J. Influence of the membrane potential on electrogenic asparagin responses in amphibian embryonic cells. 51*P*

BERGMAN J. *see* BERGMAN C. & BERGMAN J. Influence of the membrane potential on electrogenic asparagin responses in amphibian embryonic cells. 51*P*

BEVAN S, GRAY P.T.A., RANG H.P. & RITCHIE J.M. Calcium-activated ion channels in rat Schwann cells. 17*P*

BEVAN S., GRAY P.T.A. & RITCHIE J.M. A high conductance anion-selective channel in rat Schwann cells. 18*P*

BEVAN Stuart & WENDON Linda M.B. A study of the action of tetanus toxin at rat soleus neuromuscular junctions. 1

BICKNELL R.J., BROWN D., CHAPMAN C., HANCOCK P.D. & LENG G. Reversible fatigue of stimulus–secretion coupling in the rat neurohypophysis. 601

BIEDZINSKI T.M., DEVAUX M.A., JOHNSON C.D. & SARLES H. Enteropancreatic reflexes in the dog: effects of adrenergic blockade. 64*P*

BLATCHFORD D.R., HENDERSON A.J. & PEAKER M. The measurement of functional capacity of the goat mammary gland. 57*P*

BLOCH Susan & MARTINOYA C. Binocular convergence but monocular pupilloconstriction to uniocular frontal fixation in pigeons. 22*P*

BODDY A. *see* ASHTON J., BODDY A. & DONALDSON I.M.L. Interactions, in cat Area 17, between visual and orbital proprioceptive signals. 19*P*

BRADBURY M.W., FONT C. & STRONG A.J. $^{86}$Rb entry from blood into rat brain during hypotension. 29*P*

BRAND S.C. & WHITTAM R. The effect of furosemide on sodium movements in human red blood cells. 301

BRODIN E., EKMAN R., EKSTROM J., HAKANSON R. & SUNDLER F. Effect of denervation on substance P and vasoactive intestinal peptide in rat salivary glands. 67*P*

BRONK J.R., HUMPHERSON P.G. & LYNCH Susan Absorption of an amino acid mixture during vascular perfusion of rat jejunum. 71*P*

BROOK G., COSTA-JUSSA F.R., DUCHEN L.W., GOMEZ S. & JACOBS J.M. Necrosis of denervated skeletal muscle in mice fed amiodarone. 14*P*

BROT-LAROCHE E. *see* ALVARADO F. & BROT-LAROCHE E. Dual mechanisms for intestinal D-glucose and sodium cotransport in brush-border membrane vesicles from guinea-pig jejunum. 45*P*

BROWN D. *see* BICKNELL R.J., BROWN D., CHAPMAN C., HANCOCK P.D. & LENG G. Reversible fatigue of stimulus–secretion coupling in the rat neurohypophysis. 601

BURNE J.A., LIPPOLD O.C.J. & PRYOR M. Proprioceptors and normal tremor. 559

BYERLY Lou, CHASE P. Bryant & STIMERS Joseph R. Calcium current activation kinetics in neurones of the snail *Lymnaea stagnalis*. 187

CASSUTO J., EKLUND S., JODAL M. & LUNDGREN O. On the role of intramural nerves in the intestinal secretion induced by intraluminal dibutyryl cyclic adenosine 3′,5′-monophosphate and theophylline in rats and cats. 62*P*

CASTRO K. *see* BARKER S.J., CASTRO K., HOWE A. & PACK R.J. Abdominal vagal paraganglia in the rat: hypertrophic response to chronic hypoxia. 74*P*

CEVESE A., GATTULLO D., LOSANO G., MARSH N.A., VACCA G. & WHALER B.C. The cardiovascular effects of gaboon viper venom in the anaesthetized rabbit. 79*P*

CHANDLER W.K. *see* BAYLOR S.M., CHANDLER W.K. & MARSHALL M.W. Calcium release and sarcoplasmic reticulum membrane potential in frog skeletal muscle fibres. 209

CHAPMAN C. *see* BICKNELL R.J., BROWN D., CHAPMAN C., HANCOCK P.D. & LENG G. Reversible fatigue of stimulus–secretion coupling in the rat neurohypophysis. 601

CHARMET-RIFFAUD Ph., GIRAULT Monique & SYROTA A. Characterization of muscarinic cholinergic receptors in the isolated perfused rat heart. (D) 11*P*

CHASE P. Bryant *see* BYERLY Lou, CHASE P. Bryant & STIMERS Joseph R. Calcium current activation kinetics in neurones of the snail *Lymnaea stagnalis*. 187

CHRISTENSEN H.N. & VADGAMA J.V. A general convertibility of amino acid transport system ASC. 37*P*

CLARKE J.D.W., HAYES B.P., HUNT S.P. & ROBERTS Alan Sensory physiology, anatomy and immunohistochemistry of Rohon-Beard neurones in embryos of *Xenopus laevis*. 511

COHEN B., GIEBISCH G., HANSEN L.L., TEUSCHER U. & WIEDERHOLT M. Relationship between peritubular membrane potential and net fluid reabsorption in the distal renal tubule of *Amphiuma*. 115

COHEN M.W., GRESCHNER M. & TUCCI M. *In vivo* development of cholinesterase at a neuromuscular junction in the absence of motor activity in *Xenopus laevis*. 57

COLE J.D., GORDON G. & SANDERS D.J. Physiological properties of dorsal column nuclear cells of the cat which project into the spinal cord. 20*P*

COLLMAN P.I., GRUNDY D. & SCRATCHERD T. Vagal control of colonic motility in the anaesthetized ferret: evidence for a non-cholinergic excitatory innervation. 35

COOK J.E. & RANKIN Elizabeth C.C. Use of a lectin to assess the retinotopography of goldfish optic terminals. (D) 9*P*

COSTA-JUSSA F.R. *see* BROOK G., COSTA-JUSSA F.R., DUCHEN L.W., GOMEZ S. & JACOBS J.M. Necrosis of denervated skeletal muscle in mice fed amiodarone. 14*P*

COTTERRELL D. *see* BALLARD H.J., COTTERRELL D. & KARIM F. Release of adenosine into blood from contracting skeletal muscles in dogs. 78*P*

CREMER J.E. & DAY D.E. The influence of atropine on regional brain blood flow in the rat. 30*P*

CURRIE S. *see* AYLING J. Hilary, CURRIE S., ELLIS F.R., HALSALL P. Jane, HAY Edwina & ELLIS Ruth The influence of surface cooling on body temperature and heat production in patients susceptible to malignant hyperpyrexia. 34*P*

Donald H. *see* EDWARDS JR, Donald H. & MULLONEY Brian Compartmental models of electrotonic structure and synaptic integration in an identified neurone. 89

DALE N. & ROBERTS Alan Excitatory amino acid receptors in *Xenopus* embryo spinal cord and their role in the activation of swimming. 527

DAY D.E. *see* CREMER J.E. & DAY D.E. The influence of atropine on regional brain blood flow in the rat. 30*P*

DEANE R. & JONES H.C. Compliance in the developing cerebrospinal fluid system of the rat. 31*P*

DEVAUX M.A. *see* BIEDZINSKI T.M., DEVAUX M.A., JOHNSON C.D. & SARLES H. Enteropancreatic reflexes in the dog: effects of adrenergic blockade. 64*P*

DIFRANCESCO Dario Characterization of the pace-maker current kinetics in calf Purkinje fibres. 341

DONALDSON I.M.L. *see* ASHTON J., BODDY A. & DONALDSON I.M.L. Interactions, in cat Area 17, between visual and orbital proprioceptive signals. 19*P*

DONALDSON R.M. Comparison of the exercise tolerance of patients undergoing fixed rate and rate responsive pacing. 73*P*

DRAKE-HOLLAND Angela J., LAIRD John D., NOBLE Mark I.M., SPAAN Jos A.E. & VERGROESEN Isabelle Oxygen and coronary vascular resistance during autoregulation and metabolic vasodilatation in the dog. 285

DRAPEAU Pierre & NACHSHEN Daniel A. Manganese fluxes and manganese-dependent neurotransmitter release in presynaptic nerve endings isolated from rat brain. 493

DUCHEN L.W. *see* BROOK G., COSTA-JUSSA F.R., DUCHEN L.W., GOMEZ S. & JACOBS J.M. Necrosis of denervated skeletal muscle in mice fed amiodarone. 14*P*

DULLOO A.G. Presence and absence of dietary-induced thermogenesis in two strains of mice fed a high protein, high fat diet. 35*P*

DURAND-ARCZYNSKA Wanda *see* DURAND Jacques, DURAND-ARCZYNSKA Wanda & VULLIEMIN Pierre Current-induced volume flow across bovine tracheal epithelium: evidence for sodium–water coupling. 19

DURAND Jacques, DURAND-ARCZYNSKA Wanda & VULLIEMIN Pierre Current-induced volume flow across bovine tracheal epithelium: evidence for sodium–water coupling. 19

EDDY A.A. & JOHNSON E. Effect of ouabain on 2-aminoisobutyrate accumulation by mouse ascites tumour cells in the presence of nigericin. 40*P*

EDWARDS JR, Donald H. & MULLONEY Brian Compartmental models of electrotonic structure and synaptic integration in an identified neurone. 89

EISNER D.A. *see* ALLEN D.G., EISNER D.A., NIEMAN C.J. & ORCHARD C.H. The effect of exposure to Na-free solutions on post-rest contractions of ferret ventricular muscle. 53*P*

EKLUND S. *see* CASSUTO J., EKLUND S., JODAL M. & LUNDGREN O. On the role of intramural nerves in the intestinal secretion induced by intraluminal dibutyryl cyclic adenosine 3′,5′-monophosphate and theophylline in rats and cats. 62*P*

EKMAN R. *see* BRODIN E., EKMAN R., EKSTROM J., HAKANSON R. & SUNDLER F. Effect of denervation on substance P and vasoactive intestinal peptide in rat salivary glands. 67*P*

EKSTROM J. *see* BRODIN E., EKMAN R., EKSTROM J., HAKANSON R. & SUNDLER F. Effect of denervation on substance P and vasoactive intestinal peptide in rat salivary glands. 67*P*

ELLIS F.R. *see* AYLING J. Hilary, CURRIE S., ELLIS F.R., HALSALL P. Jane, HAY Edwina & ELLIS Ruth The influence of surface cooling on body temperature and heat production in patients susceptible to malignant hyperpyrexia. 34*P*

ELLIS Ruth *see* AYLING J. Hilary, CURRIE S., ELLIS F.R., HALSALL P. Jane, HAY Edwina & ELLIS Ruth The influence of surface cooling on body temperature and heat production in patients susceptible to malignant hyperpyrexia. 34*P*

ELLORY J.C. & OSOTIMEHIN B. Glutamine uptake in human erythrocytes. 44*P*

ELLORY J.C., WOLOWYK M.W. & YOUNG J.D. The properties of *p*-chloromercuriphenylsulphonate and *N*-ethylmaleimide inhibition of amino acid transport by human erythrocytes. 59*P*

EVANS Peter D. A modulatory octopaminergic neurone increases cyclic nucleotide levels in locust skeletal muscle. 307

EVANS Peter D. The role of cyclic nucleotides and calcium in the mediation of the modulatory effects of octopamine on locust skeletal muscle. 325

EVERED M.D. & ROBINSON M.M. Increased or decreased thirst caused by inhibition of angiotensin-converting enzyme in the rat. 573

FONT C. *see* BRADBURY M.W., FONT C. & STRONG A.J. $^{86}$Rb entry from blood into rat brain during hypotension. 29*P*

FRY C.H. & WALKER J.M. A numerical method for the calculation of the characteristic time constant of dynamic systems. (D) 12*P*

FULLER C.M. & GALLACHER D.V. Beta-adrenergic receptor activation in isolated rat parotid glands: effects of field stimulation, isoprenaline and isobutylmethylxanthine. 46*P*

GALLACHER D.V. *see* FULLER C.M. & GALLACHER D.V. Beta-adrenergic receptor activation in isolated rat parotid glands: effects of field stimulation, isoprenaline and isobutylmethylxanthine. 46*P*

GARDINER S.M. *see* BENNETT T. & GARDINER S.M. Control of blood pressure during fluid deprivation in rats (Brattlebro strain) with a congenital inability to synthesize vasopressin. 60*P*

GARRETT J.R., HARROP T.J. & THULIN A. Factors affecting reflex secretion of parotid acinar granules in rats after chronic sympathectomy. 66*P*

GATTULLO D., LOSANO G., MARSH N.A. & VACCA G. Interaction between vascular elasticity and myogenic mechanism in the regulation of mean diastolic coronary resistance in the dog. 72*P*

GATTULLO D. *see* CEVESE A., GATTULLO D., LOSANO G., MARSH N.A., VACCA G. & WHALER B.C. The cardiovascular effects of gaboon viper venom in the anaesthetized rabbit. 79*P*

GEE Jennifer M., JOHNSON I.T. & SOUTHON Susan Structural and functional changes in the jejunal mucosa of the zinc-deficient rat. 65*P*

GHALAYINI Rita, HAWGOOD Barbara J. & WHALER B.C. Arrhythmia induced by timber rattlesnake (*Crotalus horridus horridus*) venom in the isolated rat heart. 80*P*

GIEBISCH G. *see* COHEN B., GIEBISCH G., HANSEN L.L., TEUSCHER U. & WIEDERHOLT M. Relationship between peritubular membrane potential and net fluid reabsorption in the distal renal tubule of *Amphiuma*. 115

GIRALDEZ F. Active sodium transport and fluid secretion in the gall-bladder epithelium of *Necturus*. 431

GIRAULT Monique *see* CHARMET-RIFFAUD Ph., GIRAULT Monique & SYROTA A. Characterization of muscarinic cholinergic receptors in the isolated perfused rat heart. (D) 11*P*

GOMEZ S. *see* BROOK G., COSTA-JUSSA F.R., DUCHEN L.W., GOMEZ S. & JACOBS J.M. Necrosis of denervated skeletal muscle in mice fed amiodarone. 14*P*

GONCALVES A. *see* ATWATER Illani, GONCALVES A., HERCHUELZ A., LEBRUN P., MALAISSE W.J., ROJAS E. & SCOTT Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

GORDON G. *see* COLE J.D., GORDON G. & SANDERS D.J. Physiological properties of dorsal column nuclear cells of the cat which project into the spinal cord. 20*P*

GRAY P.T.A. *see* BEVAN S, GRAY P.T.A., RANG H.P. & RITCHIE J.M. Calcium-activated ion channels in rat Schwann cells. 17*P*

GRAY P.T.A. *see* BEVAN S., GRAY P.T.A. & RITCHIE J.M. A high conductance anion-selective channel in rat Schwann cells. 18*P*

GREENWOOD J. & PRATT O.E. A method for the continuous sampling of arterial blood in rats or other small animals. (D) 7*P*

GREENWOOD J. & PRATT O.E. The effect of ethanol upon thiamine transport across the blood–brain barrier in the rat. 61*P*

GRESCHNER M. *see* COHEN M.W., GRESCHNER M. & TUCCI M. *In vivo* development of cholinesterase at a neuromuscular junction in the absence of motor activity in *Xenopus laevis*. 57

GRUNDY D. *see* COLLMAN P.I., GRUNDY D. & SCRATCHERD T. Vagal control of colonic motility in the anaesthetized ferret: evidence for a non-cholinergic excitatory innervation. 35

HAKANSON R. *see* BRODIN E., EKMAN R., EKSTROM J., HAKANSON R. & SUNDLER F. Effect of denervation on substance P and vasoactive intestinal peptide in rat salivary glands. 67*P*

HALL Andrew C. & WILLIS John S. Differential effects of temperature on three components of passive permeability to potassium in rodent red cells. 629

HALSALL P. Jane *see* AYLING J. Hilary, CURRIE S., ELLIS F.R., HALSALL P. Jane, HAY Edwina & ELLIS Ruth The influence of surface cooling on body temperature and heat production in patients susceptible to malignant hyperpyrexia. 34*P*

HANCOCK P.D. *see* BICKNELL R.J., BROWN D., CHAPMAN C., HANCOCK P.D. & LENG G. Reversible fatigue of stimulus–secretion coupling in the rat neurohypophysis. 601

HANSEN L.L. *see* COHEN B., GIEBISCH G., HANSEN L.L., TEUSCHER U. & WIEDERHOLT M. Relationship between peritubular membrane potential and net fluid reabsorption in the distal renal tubule of *Amphiuma*. 115

HARRISON P.J. & JANKOWSKA E. Excitation of cat spinocervical tract neurones by corticospinal fibres. 21*P*

HARROP T.J. *see* GARRETT J.R., HARROP T.J. & THULIN A. Factors affecting reflex secretion of parotid acinar granules in rats after chronic sympathectomy. 66*P*

HAWGOOD Barbara J. *see* GHALAYINI Rita, HAWGOOD Barbara J. & WHALER B.C. Arrhythmia induced by timber rattlesnake (*Crotalus horridus horridus*) venom in the isolated rat heart. 80*P*

HAY Edwina *see* AYLING J. Hilary, CURRIE S., ELLIS F.R., HALSALL P. Jane, HAY Edwina & ELLIS Ruth The influence of surface cooling on body temperature and heat production in patients susceptible to malignant hyperpyrexia. 34*P*

HAYES B.P. *see* CLARKE J.D.W., HAYES B.P., HUNT S.P. & ROBERTS Alan Sensory physiology, anatomy and immunohistochemistry of Rohon-Beard neurones in embryos of *Xenopus laevis*. 511

HEDEMARK POULSEN J., SMAJE L.H. & USSING H.H. Evidence from $O_2$ uptake measurements for ($Na^+$–$K^+$–$2Cl^-$) co-transport in the rabbit submandibular gland. 43*P*

HENDERSON A.J. *see* BLATCHFORD D.R., HENDERSON A.J. & PEAKER M. The measurement of functional capacity of the goat mammary gland. 57*P*

HERCHUELZ A. *see* ATWATER Illani, GONCALVES A., HERCHUELZ A., LEBRUN P., MALAISSE W.J., ROJAS E. & SCOTT Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

HII C.T.S. & HOWELL S.L. Effects of epicatechin on cAMP content of isolated rat islets of Langerhans. 42*P*

HILLS B.A. 'De-watering' capabilities of surfactants in human amniotic fluid. 369

HINSON J.P., PRICE G., PUDNEY J., VINSON G.P. & WHITEHOUSE B.J. Morphological responses to stimulation in the rat adrenal cortex perfused *in situ*. (D) 10*P*

HOLLANDERS D., HUSBAND Ellen M., MORRISSEY Shelagh M., TOVEY F.I. & WARD P.M. Histochemistry of gastric mucins in smokers and non-smokers. (D) 8*P*

HOWE A. *see* BARKER S.J., CASTRO K., HOWE A. & PACK R.J. Abdominal vagal paraganglia in the rat: hypertrophic response to chronic hypoxia. 74*P*

HOWELL S.L. *see* HII C.T.S. & HOWELL S.L. Effects of epicatechin on cAMP content of isolated rat islets of Langerhans. 42*P*

HOWELL S.L. *see* LLOYD DAVIES E.R.V., HOWELL S.L. & TYHURST M. Cryopreservation of adult rat pancreatic fragments and assessment of post-thaw viability. 56*P*

HUMPHERSON P.G. *see* BRONK J.R., HUMPHERSON P.G. & LYNCH Susan Absorption of an amino acid mixture during vascular perfusion of rat jejunum. 71*P*

HUNT S.P. *see* CLARKE J.D.W., HAYES B.P., HUNT S.P. & ROBERTS Alan Sensory physiology, anatomy and immunohistochemistry of Rohon-Beard neurones in embryos of *Xenopus laevis*. 511

HUSBAND Ellen M. *see* HOLLANDERS D., HUSBAND Ellen M., MORRISSEY Shelagh M., TOVEY F.I. & WARD P.M. Histochemistry of gastric mucins in smokers and non-smokers. (D) 8*P*

ISHIDA Andrew T., KANEKO Akimichi & TACHIBANA Masao Responses of solitary retinal horizontal cells from *Carassius auratus* to L-glutamate and related amino acids. 255

IWATSUKI N., KATOH K. & NISHIYAMA A. Effects of divalent cations on ACh-evoked membrane potential changes in the ionophore A23187-treated mouse pancreatic acinar cells. 49*P*

JACKSON Michael J. Effect of sodium on transport of weak electrolytes across rat jejunum *in vitro*. 417

JACOBS J.M. *see* BROOK G., COSTA-JUSSA F.R., DUCHEN L.W., GOMEZ S. & JACOBS J.M. Necrosis of denervated skeletal muscle in mice fed amiodarone. 14*P*

JACQUIN Mark F., MOONEY Richard D. & RHOADES Robert W. Altered somatosensory receptive fields in hamster colliculus after infraorbital nerve section and xylocaine injection. 471

JANKOWSKA E. *see* HARRISON P.J. & JANKOWSKA E. Excitation of cat spinocervical tract neurones by corticospinal fibres. 21*P*

JEN L.S. & ZEKI S. High cytochrome oxidase content of the V5 complex of Macaque monkey visual cortex. 23*P*

JODAL M. *see* CASSUTO J., EKLUND S., JODAL M. & LUNDGREN O. On the role of intramural nerves in the intestinal secretion induced by intraluminal dibutyryl cyclic adenosine 3′,5′-monophosphate and theophylline in rats and cats. 62*P*

JOHNSON C.D. *see* BIEDZINSKI T.M., DEVAUX M.A., JOHNSON C.D. & SARLES H. Enteropancreatic reflexes in the dog: effects of adrenergic blockade. 64*P*

JOHNSON E. *see* EDDY A.A. & JOHNSON E. Effect of ouabain on 2-aminoisobutyrate accumulation by mouse ascites tumour cells in the presence of nigericin. 40*P*

JOHNSON I.T. *see* GEE Jennifer M., JOHNSON I.T. & SOUTHON Susan Structural and functional changes in the jejunal mucosa of the zinc-deficient rat. 65*P*

JOHNSTON Barbara M., JONES C.T., LAGERCRANTZ H., ROEBUCK Margaret M. & WALKER D.W. A role for the adrenal medulla in the control of peripheral sensitivity to catecholamines in fetal sheep. 68*P*

JONES C.T. *see* JOHNSTON Barbara M., JONES C.T., LAGERCRANTZ H., ROEBUCK Margaret M. & WALKER D.W. A role for the adrenal medulla in the control of peripheral sensitivity to catecholamines in fetal sheep. 68*P*

JONES H.C. *see* DEANE R. & JONES H.C. Compliance in the developing cerebrospinal fluid system of the rat. 31*P*

KANEKO Akimichi *see* ISHIDA Andrew T., KANEKO Akimichi & TACHIBANA Masao Responses of solitary retinal horizontal cells from *Carassius auratus* to L-glutamate and related amino acids. 255

KARIM F. *see* BALLARD H.J., COTTERRELL D. & KARIM F. Release of adenosine into blood from contracting skeletal muscles in dogs. 78*P*

KATOH K. *see* IWATSUKI, N., KATOH K. & NISHIYAMA A. Effects of divalent cations on ACh-evoked membrane potential changes in the ionophore A23187-treated mouse pancreatic acinar cells. 49*P*

KAUMANN A.J. & LEMOINE H. Separation of catecholamine binding and relaxation in bovine tracheal muscle dependent upon cyclic AMP. 47*P*

KAWAKAMI Masazumi, KIMURA Fukuko & TSAI Cheng-Wei Relationship between the three-hour-period sleep–wakefulness cycle and growth hormone secretion in the immature rat. 271

KIMURA Fukuko *see* KAWAKAMI Masazumi, KIMURA Fukuko & TSAI Cheng-Wei Relationship between the three-hour-period sleep–wakefulness cycle and growth hormone secretion in the immature rat. 271

LAGERCRANTZ H. *see* JOHNSTON Barbara M., JONES C.T., LAGERCRANTZ H., ROEBUCK Margaret M. & WALKER D.W. A role for the adrenal medulla in the control of peripheral sensitivity to catecholamines in fetal sheep. 68*P*

LAIRD John D. *see* DRAKE-HOLLAND Angela J., LAIRD John D., NOBLE Mark I.M., SPAAN Jos A.E. & VERGROESEN Isabelle Oxygen and coronary vascular resistance during autoregulation and metabolic vasodilatation in the dog. 285

LARGE W.A. & WILSONCROFT P.S. The effect of chloride removal on the electrical and contractile responses of the isolated rat anococcygeus muscle to noradrenaline. 54*P*

LEBRUN P. *see* ATWATER Illani, GONCALVES A., HERCHUELZ A., LEBRUN P., MALAISSE W.J., ROJAS E. & SCOTT Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

LEDERER W.J. & NELSON M.T. Sodium pump stoicheiometry determined by simultaneous measurements of sodium efflux and membrane current in barnacle. 665

LEMOINE H. *see* KAUMANN A.J. & LEMOINE H. Separation of catecholamine binding and relaxation in bovine tracheal muscle dependent upon cyclic AMP. 47*P*

LENG G. *see* BICKNELL R.J., BROWN D., CHAPMAN C., HANCOCK P.D. & LENG G. Reversible fatigue of stimulus–secretion coupling in the rat neurohypophysis. 601

LESLIE G.C. & PART N.J. The effect of stimulation at 3 Hz on fast and slow skeletal muscle in the rat. 55*P*

LIPPOLD O.C.J. *see* BURNE J.A., LIPPOLD O.C.J. & PRYOR M. Proprioceptors and normal tremor. 559

LLOYD DAVIES E.R.V., HOWELL S.L. & TYHURST M. Cryopreservation of adult rat pancreatic fragments and assessment of post-thaw viability. 56*P*

LOSANO G. *see* GATTULLO D., LOSANO G., MARSH N.A. & VACCA G. Interaction between vascular elasticity and myogenic mechanism in the regulation of mean diastolic coronary resistance in the dog. 72*P*

LOSANO G. *see* CEVESE A., GATTULLO D., LOSANO G., MARSH N.A., VACCA G. & WHALER B.C. The cardiovascular effects of gaboon viper venom in the anaesthetized rabbit. 79*P*

LUNDGREN O. *see* CASSUTO J., EKLUND S., JODAL M. & LUNDGREN O. On the role of intramural nerves in the intestinal secretion induced by intraluminal dibutyryl cyclic adenosine 3′,5′-monophosphate and theophylline in rats and cats. 62*P*

LYNCH Susan *see* BRONK J.R., HUMPHERSON P.G. & LYNCH Susan Absorption of an amino acid mixture during vascular perfusion of rat jejunum. 71*P*

MCBAIN Anne & WHEAL H.V. Structure activity investigation of the glutamate receptor at the neuro-muscular junction (NMJ) of the hermit crab (*Eupagurus bernhardus*). 52*P*

MCCLURKIN J.W. & MARROCCO R.T. Visual cortical input alters spatial tuning in monkey lateral geniculate nucleus cells. 135

MacDonald I.A. & Wheeler A.K. Catecholamine-stimulated thermogenesis in rats with a congenital inability to synthesize vasopressin (Brattleboro strain). 33*P*

MacLeish P.R., Schwartz E.A. & Tachibana M. Control of the generator current in solitary rods of the *Ambystoma tigrinum* retina. 645

MacPhail Moira *see* Baillie P. & MacPhail Moira Rate of food ingestion by lactating rats. 58*P*

Malaisse W.J. *see* Atwater Illani, Goncalves A., Herchuelz A., Lebrun P., Malaisse W.J., Rojas E. & Scott Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

Mann G.E. & Yudilevich D.L. Rapid transcapillary exchange and unidirectional neuronal uptake of noradrenaline in the perfused rabbit heart. 589

Mann G.E., Munoz M., Pastor Maria-Angeles & Peran S. Rapid measurements of unidirectional amino acid influx at the basolateral membrane of the epithelium in the intact perfused rat pancreas. (D) 2*P*

Mann G.E., Wilson S.M. & Yudilevich D.L. Substrate transport at the basolateral membrane of the epithelium in the artificially perfused cat submandibular salivary gland. (D) 3*P*

Marrocco R.T. *see* McClurkin J.W. & Marrocco R.T. Visual cortical input alters spatial tuning in monkey lateral geniculate nucleus cells. 135

Marsh N.A. *see* Gattullo D., Losano G., Marsh N.A. & Vacca G. Interaction between vascular elasticity and myogenic mechanism in the regulation of mean diastolic coronary resistance in the dog. 72*P*

Marsh N.A. *see* Cevese A., Gattullo D., Losano G., Marsh N.A., Vacca G. & Whaler B.C. The cardiovascular effects of gaboon viper venom in the anaesthetized rabbit. 79*P*

Marshall M.W. *see* Baylor S.M., Chandler W.K. & Marshall M.W. Calcium release and sarcoplasmic reticulum membrane potential in frog skeletal muscle fibres. 209

Martinoya C. *see* Bloch Susan & Martinoya C. Binocular convergence but monocular pupillocon-striction to uniocular frontal fixation in pigeons. 22*P*

Maruyama Y. & Petersen O.H. Control of $K^+$ conductance by cholecystokinin and $Ca^{2+}$ in single pig pancreatic acinar cells studied by patch-clamp technique. 39*P*

Matthews Peter B.C. Evidence from the use of vibration that the human long-latency stretch reflex depends upon spindle secondary afferents. 383

Matthews Peter B.C. The contrasting stretch reflex responses of the long and short flexor muscles of the human thumb. 545

Mæhlen Jan & Njå Arild Rearrangement of synapses on guinea-pig sympathetic ganglion cells after partial interruption of preganglionic nerve. 43

Mehta J.G. & Morrissey Shelagh M. Effect of tripotassium dicitrate bismuthate (De-nol) on the $H^+$ ion back diffusion in the guinea pig stomach. (D) 5*P*

Mina M. & Morrissey Shelagh M. Effect of Cystic Fibrosis (CF), non-CF serum and pancreotone on the transport and retention of $^{36}Cl$, $^3H_2O$ in rat gastrointestinal mucosae. (D) 4*P*

Mitchell M.A. Effects of glucagon on plasma albumin bound non-esterified fatty acids in cold acclimated domestic fowls. 32*P*

Mooney Richard D. *see* Jacquin Mark F., Mooney Richard D. & Rhoades Robert W. Altered somatosensory receptive fields in hamster colliculus after infraorbital nerve section and xylocaine injection. 471

Morii S., Ngai A.L., Strong A.J. & Winn H.R. Measurement of blood to brain potassium fluxes in hypoxia and hypotension in the rat using ion selective electrodes. 28*P*

Morrissey Shelagh & Ward P.M. Electrical stimulation of the lateral hypothalamus and gastric secretion in the conscious albino rat. 69*P*

Morrissey Shelagh M. *see* Mina M. & Morrissey Shelagh M. Effect of Cystic Fibrosis (CF), non-CF serum and pancreotone on the transport and retention of $^{36}Cl$, $^3H_2O$ in rat gastrointestinal mucosae. (D) 4*P*

Morrissey Shelagh M. *see* Mehta J.G. & Morrissey Shelagh M. Effect of tripotassium dicitrate bismuthate (De-nol) on the $H^+$ ion back diffusion in the guinea pig stomach. (D) 5*P*

Morrissey Shelagh M. *see* Hollanders D., Husband Ellen M., Morrissey Shelagh M., Tovey F.I. & Ward P.M. Histochemistry of gastric mucins in smokers and non-smokers. (D) 8*P*

Mulloney Brian *see* Edwards Jr, Donald H. & Mulloney Brian Compartmental models of electrotonic structure and synaptic integration in an identified neurone. 89

MUNOZ M. *see* MANN G.E., MUNOZ M., PASTOR Maria-Angeles & PERAN S. Rapid measurements of unidirectional amino acid influx at the basolateral membrane of the epithelium in the intact perfused rat pancreas. (D) 2*P*

NACHSHEN Daniel A. *see* DRAPEAU Pierre & NACHSHEN Daniel A. Manganese fluxes and manganese-dependent neurotransmitter release in presynaptic nerve endings isolated from rat brain. 493

NAFTALIN R.J. & SMITH P.M. A microprocessor based device for the control and measurement of short-circuit current across small intestine. (D) 13*P*

NELSON M.T. *see* LEDERER W.J. & NELSON M.T. Sodium pump stoicheiometry determined by simultaneous measurements of sodium efflux and membrane current in barnacle. 665

NEWBERRY N.R. & NICOLL R.A. A bicuculline-resistant inhibitory post-synaptic potential in rat hippocampal pyramidal cells *in vitro*. 239

NEWSTEAD C.G. & WOLFF C.B. The mean alveolar carbon dioxide tension in man. 76*P*

NGAI A.L. *see* MORII S., NGAI A.L., STRONG A.J. & WINN H.R. Measurement of blood to brain potassium fluxes in hypoxia and hypotension in the rat using ion selective electrodes. 28*P*

NICOLL R.A. *see* NEWBERRY N.R. & NICOLL R.A. A bicuculline-resistant inhibitory post-synaptic potential in rat hippocampal pyramidal cells *in vitro*. 239

NIEMAN C.J. *see* ALLEN D.G., EISNER D.A., NIEMAN C.J. & ORCHARD C.H. The effect of exposure to Na-free solutions on post-rest contractions of ferret ventricular muscle. 53*P*

NISHIYAMA A. *see* IWATSUKI N., KATOH K. & NISHIYAMA A. Effects of divalent cations on ACh-evoked membrane potential changes in the ionophore A23187-treated mouse pancreatic acinar cells. 49*P*

NJÅ Arild *see* MÆHLEN Jan & NJÅ Arild Rearrangement of synapses on guinea-pig sympathetic ganglion cells after partial interruption of preganglionic nerve. 43

NOBLE Mark I.M. *see* DRAKE-HOLLAND Angela J., LAIRD John D., NOBLE Mark I.M., SPAAN Jos A.E. & VERGROESEN Isabelle Oxygen and coronary vascular resistance during autoregulation and metabolic vasodilatation in the dog. 285

ORCHARD C.H. *see* ALLEN D.G., EISNER D.A., NIEMAN C.J. & ORCHARD C.H. The effect of exposure to Na-free solutions on post-rest contractions of ferret ventricular muscle. 53*P*

OSOTIMEHIN B. *see* ELLORY J.C. & OSOTIMEHIN B. Glutamine uptake in human erythrocytes. 44*P*

PACK R.J. *see* BARKER S.J., CASTRO K., HOWE A. & PACK R.J. Abdominal vagal paraganglia in the rat: hypertrophic response to chronic hypoxia. 74*P*

PARSONS B.J., POAT Judith A. & ROBERTS Penny A. Effects of protein synthesis inhibitors on noradrenaline stimulated fluid transport by isolated rat jejunum. 70*P*

PART N.J. *see* LESLIE G.C. & PART N.J. The effect of stimulation at 3 Hz on fast and slow skeletal muscle in the rat. 55*P*

PASTOR Maria-Angeles *see* MANN G.E., MUNOZ M., PASTOR Maria-Angeles & PERAN S. Rapid measurements of unidirectional amino acid influx at the basolateral membrane of the epithelium in the intact perfused rat pancreas. (D) 2*P*

PEAKER M. *see* BLATCHFORD D.R., HENDERSON A.J. & PEAKER M. The measurement of functional capacity of the goat mammary gland. 57*P*

PERAN S. *see* MANN G.E., MUNOZ M., PASTOR Maria-Angeles & PERAN S. Rapid measurements of unidirectional amino acid influx at the basolateral membrane of the epithelium in the intact perfused rat pancreas. (D) 2*P*

PETERSEN O.H. *see* MARUYAMA Y. & PETERSEN O.H. Control of $K^+$ conductance by cholecystokinin and $Ca^{2+}$ in single pig pancreatic acinar cells studied by patch-clamp technique. 39*P*

POAT Judith A. *see* PARSONS B.J., POAT Judith A. & ROBERTS Penny A. Effects of protein synthesis inhibitors on noradrenaline stimulated fluid transport by isolated rat jejunum. 70*P*

POLLARD M. *see* ASHWORTH M., POLLARD M. & RUTISHAUSER Sigrid C.B. Hepatic extraction of amiloride in the guinea-pig: its inhibition by choline. 36*P*

POTT L. *see* BECHEM M. & POTT L. K-channels activated by loss of intracellular ATP in guinea-pig atrial cardioballs. 50*P*

PRATT O.E. *see* GREENWOOD J. & PRATT O.E. A method for the continuous sampling of arterial blood in rats or other small animals. (D) 7*P*

PRATT O.E. *see* GREENWOOD J. & PRATT O.E. The effect of ethanol upon thiamine transport across the blood–brain barrier in the rat. 61*P*

PRICE G. *see* HINSON J.P., PRICE G., PUDNEY J., VINSON G.P. & WHITEHOUSE B.J. Morphological responses to stimulation in the rat adrenal cortex perfused *in situ*. (D) 10*P*

PRYOR M. *see* BURNE J.A., LIPPOLD O.C.J. & PRYOR M. Proprioceptors and normal tremor. 559

PUDNEY J. *see* HINSON J.P., PRICE G., PUDNEY J., VINSON G.P. & WHITEHOUSE B.J. Morphological responses to stimulation in the rat adrenal cortex perfused *in situ*. (D) 10*P*

RANG H.P. *see* BEVAN S, GRAY P.T.A., RANG H.P. & RITCHIE J.M. Calcium-activated ion channels in rat Schwann cells. 17*P*

RANKIN Elizabeth C.C. *see* COOK J.E. & RANKIN Elizabeth C.C. Use of a lectin to assess the retinotopography of goldfish optic terminals. (D) 9*P*

RHOADES Robert W. *see* JACQUIN Mark F., MOONEY Richard D. & RHOADES Robert W. Altered somatosensory receptive fields in hamster colliculus after infraorbital nerve section and xylocaine injection. 471

RICHTER D.W. *see* BALLANTYNE D. & RICHTER D.W. Post-synaptic inhibition of bulbar inspiratory neurones in the cat. 67

RITCHIE J.M. *see* BEVAN S, GRAY P.T.A., RANG H.P. & RITCHIE J.M. Calcium-activated ion channels in rat Schwann cells. 17*P*

RITCHIE J.M. *see* BEVAN S., GRAY P.T.A. & RITCHIE J.M. A high conductance anion-selective channel in rat Schwann cells. 18*P*

ROBERTS Alan *see* CLARKE J.D.W., HAYES B.P., HUNT S.P. & ROBERTS Alan Sensory physiology, anatomy and immunohistochemistry of Rohon-Beard neurones in embryos of *Xenopus laevis*. 511

ROBERTS Alan *see* DALE N. & ROBERTS Alan Excitatory amino acid receptors in *Xenopus* embryo spinal cord and their role in the activation of swimming. 527

ROBERTS Penny A. *see* PARSONS B.J., POAT Judith A. & ROBERTS Penny A. Effects of protein synthesis inhibitors on noradrenaline stimulated fluid transport by isolated rat jejunum. 70*P*

ROBERTSON H.A. Effects of benzodiazepine antagonists on kindled seizures: evidence for multiple benzodiazepine receptors. 25*P*

ROBINSON M.M. *see* EVERED M.D. & ROBINSON M.M. Increased or decreased thirst caused by inhibition of angiotensin-converting enzyme in the rat. 573

ROEBUCK Margaret M. *see* JOHNSTON Barbara M., JONES C.T., LAGERCRANTZ H., ROEBUCK Margaret M. & WALKER D.W. A role for the adrenal medulla in the control of peripheral sensitivity to catecholamines in fetal sheep. 68*P*

ROJAS E. *see* ATWATER Illani, GONCALVES A., HERCHUELZ A., LEBRUN P., MALAISSE W.J., ROJAS E. & SCOTT Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

ROSTAIN J.C. & WARDLEY-SMITH Bridget The role of glycine in the high pressure neurological syndrome in the rat. 24*P*

ROWLING Pamela J.E. & SEPULVEDA F.V. Na–K–ATPase activity and ouabain binding in epithelial cells isolated from the rabbit small intestine. 48*P*

RUCKEBUSCH M. & SUTRA J.F. On the significance of monoamines and their metabolites in the cerebrospinal fluid of the sheep. 457

RUTISHAUSER Sigrid C.B. *see* ASHWORTH M., POLLARD M. & RUTISHAUSER Sigrid C.B. Hepatic extraction of amiloride in the guinea-pig: its inhibition by choline. 36*P*

SANDERS D.J. *see* COLE J.D., GORDON G. & SANDERS D.J. Physiological properties of dorsal column nuclear cells of the cat which project into the spinal cord. 20*P*

SARLES H. *see* BIEDZINSKI T.M., DEVAUX M.A., JOHNSON C.D. & SARLES H. Enteropancreatic reflexes in the dog: effects of adrenergic blockade. 64*P*

SCHWARTZ E.A. *see* MACLEISH P.R., SCHWARTZ E.A. & TACHIBANA M. Control of the generator current in solitary rods of the *Ambystoma tigrinum* retina. 645

SCOTT Angela *see* ATWATER Illani, GONCALVES A., HERCHUELZ A., LEBRUN P., MALAISSE W.J., ROJAS E. & SCOTT Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

SCRATCHERD T. *see* COLLMAN P.I., GRUNDY D. & SCRATCHERD T. Vagal control of colonic motility in the anaesthetized ferret: evidence for a non-cholinergic excitatory innervation. 35

SEPULVEDA F.V. *see* ROWLING Pamela J.E. & SEPULVEDA F.V. Na–K–ATPase activity and ouabain binding in epithelial cells isolated from the rabbit small intestine. 48*P*

SMAJE L.H. *see* HEDEMARK POULSEN J., SMAJE L.H. & USSING H.H. Evidence from $O_2$ uptake measurements for ($Na^+$–$K^+$–$2Cl^-$) co-transport in the rabbit submandibular gland. 43*P*

SMITH I.C.H. Modelling paired-tracer dilution measurements of substrate uptake from the microcirculation. (D) 6*P*

SMITH P.M. *see* NAFTALIN R.J. & SMITH P.M. A microprocessor based device for the control and measurement of short-circuit current across small intestine. (D) 13*P*

SOUTHON Susan *see* GEE Jennifer M., JOHNSON I.T. & SOUTHON Susan Structural and functional changes in the jejunal mucosa of the zinc-deficient rat. 65*P*

SPAAN Jos A.E. *see* DRAKE-HOLLAND Angela J., LAIRD John D., NOBLE Mark I.M., SPAAN Jos A.E. & VERGROESEN Isabelle Oxygen and coronary vascular resistance during autoregulation and metabolic vasodilatation in the dog. 285

STACEY M.J. *see* BARKER D. & STACEY M.J. Presynaptic features of cat intrafusal motor innervation. 15*P*

STIMERS Joseph R. *see* BYERLY Lou, CHASE P. Bryant & STIMERS Joseph R. Calcium current activation kinetics in neurones of the snail *Lymnaea stagnalis*. 187

STRONG *see* MORII S., NGAI A.L., STRONG A.J. & WINN H.R. Measurement of blood to brain potassium fluxes in hypoxia and hypotension in the rat using ion selective electrodes. 28*P*

STRONG A.J. *see* BRADBURY M.W., FONT C. & STRONG A.J. $^{86}$Rb entry from blood into rat brain during hypotension. 29*P*

SUNDLER F. *see* BRODIN E., EKMAN R., EKSTROM J., HAKANSON R. & SUNDLER F. Effect of denervation on substance P and vasoactive intestinal peptide in rat salivary glands. 67*P*

SUTRA J.F. *see* RUCKEBUSCH M. & SUTRA J.F. On the significance of monoamines and their metabolites in the cerebrospinal fluid of the sheep. 457

SWEIRY J.H. & YUDILEVICH D.L. Unidirectional choline influx and its inhibition by hemicholinium-3 at maternal and fetal sides of the guinea-pig placenta. 41*P*

SYROTA A. *see* CHARMET-RIFFAUD Ph., GIRAULT Monique & SYROTA A. Characterization of muscarinic cholinergic receptors in the isolated perfused rat heart. (D) 11*P*

TACHIBANA M. *see* MACLEISH P.R., SCHWARTZ E.A. & TACHIBANA M. Control of the generator current in solitary rods of the *Ambystoma tigrinum* retina. 645

TACHIBANA Masao *see* ISHIDA Andrew T., KANEKO Akimichi & TACHIBANA Masao Responses of solitary retinal horizontal cells from *Carassius auratus* to L-glutamate and related amino acids. 255

TAYLOR D.E.M. The genesis of Starling waves in slow hypovolaemia in the dog. 77*P*

TEUSCHER U. *see* COHEN B., GIEBISCH G., HANSEN L.L., TEUSCHER U. & WIEDERHOLT M. Relationship between peritubular membrane potential and net fluid reabsorption in the distal renal tubule of *Amphiuma*. 115

THULIN A. *see* GARRETT J.R., HARROP T.J. & THULIN A. Factors affecting reflex secretion of parotid acinar granules in rats after chronic sympathectomy. 66*P*

TOFTS P. & WRAY Susan Changes with age of phosphorus metabolites in rat brain, detected by nuclear magnetic resonance (NMR). 26*P*

TOVEY F.I. *see* HOLLANDERS D., HUSBAND Ellen M., MORRISSEY Shelagh M., TOVEY F.I. & WARD P.M. Histochemistry of gastric mucins in smokers and non-smokers. (D) 8*P*

TSAI Cheng-Wei *see* KAWAKAMI Masazumi, KIMURA Fukuko & TSAI Cheng-Wei Relationship between the three-hour-period sleep–wakefulness cycle and growth hormone secretion in the immature rat. 271

TUCCI M. *see* COHEN M.W., GRESCHNER M. & TUCCI M. *In vivo* development of cholinesterase at a neuromuscular junction in the absence of motor activity in *Xenopus laevis*. 57

TURNER S.A. A study of catecholamine effects on the baroreceptor reflex pathway in the rabbit. 75*P*

TYHURST M. *see* LLOYD DAVIES E.R.V., HOWELL S.L. & TYHURST M. Cryopreservation of adult rat pancreatic fragments and assessment of post-thaw viability. 56*P*

USSING H.H. *see* HEDEMARK POULSEN J., SMAJE L.H. & USSING H.H. Evidence from $O_2$ uptake measurements for ($Na^+$–$K^+$–$2Cl^-$) co-transport in the rabbit submandibular gland. 43*P*

VACCA G. *see* GATTULLO D., LOSANO G., MARSH N.A. & VACCA G. Interaction between vascular elasticity and myogenic mechanism in the regulation of mean diastolic coronary resistance in the dog. 72*P*

VACCA G. *see* CEVESE A., GATTULLO D., LOSANO G., MARSH N.A., VACCA G. & WHALER B.C. The cardiovascular effects of gaboon viper venom in the anaesthetized rabbit. 79*P*

VADGAMA J.V. *see* CHRISTENSEN H.N. & VADGAMA J.V. A general convertibility of amino acid transport system ASC. 37*P*

VAN HEESWIJK M.P.E. & VAN OS C.H. Hydraulic conductivity of rabbit kidney brush border membrane vesicles. 27*P*

VAN HEESWIJK M.P.E. & VAN OS C.H. Transport properties of $Na^+/Ca^{2+}$ exchange and ATP-dependent $Ca^{2+}$ transport in basolateral membranes from rat kidney cortex. 38*P*

VAN OS C.H. *see* VAN HEESWIJK M.P.E. & VAN OS C.H. . Hydraulic conductivity of rabbit kidney brush border membrane vesicles. 27*P*

VAN OS C.H. *see* VAN HEESWIJK M.P.E. & VAN OS C.H. Transport properties of $Na^+/Ca^{2+}$ exchange and ATP-dependent $Ca^{2+}$ transport in basolateral membranes from rat kidney cortex. 38*P*

VERGROESEN Isabelle *see* DRAKE-HOLLAND Angela J., LAIRD John D., NOBLE Mark I.M., SPAAN Jos A.E. & VERGROESEN Isabelle Oxygen and coronary vascular resistance during autoregulation and metabolic vasodilatation in the dog. 285

VINSON G.P. *see* HINSON J.P., PRICE G., PUDNEY J., VINSON G.P. & WHITEHOUSE B.J. Morphological responses to stimulation in the rat adrenal cortex perfused *in situ*. (D) 10*P*

VULLIEMIN Pierre *see* DURAND Jacques, DURAND-ARCZYNSKA Wanda & VULLIEMIN Pierre Current-induced volume flow across bovine tracheal epithelium: evidence for sodium–water coupling. 19

WALKER D.W. *see* JOHNSTON Barbara M., JONES C.T., LAGERCRANTZ H., ROEBUCK Margaret M. & WALKER D.W. A role for the adrenal medulla in the control of peripheral sensitivity to catecholamines in fetal sheep. 68*P*

WALKER J.M. *see* FRY C.H. & WALKER J.M. A numerical method for the calculation of the characteristic time constant of dynamic systems. (D) 12*P*

WARD P.M. *see* HOLLANDERS D., HUSBAND Ellen M., MORRISSEY Shelagh M., TOVEY F.I. & WARD P.M. Histochemistry of gastric mucins in smokers and non-smokers. (D) 8*P*

WARD P.M. *see* MORRISSEY Shelagh & WARD P.M. Electrical stimulation of the lateral hypothalamus and gastric secretion in the conscious albino rat. 69*P*

WARDLEY-SMITH Bridget *see* ROSTAIN J.C. & WARDLEY-SMITH Bridget The role of glycine in the high pressure neurological syndrome in the rat. 24*P*

WENDON Linda M.B. *see* BEVAN Stuart & WENDON Linda M.B. A study of the action of tetanus toxin at rat soleus neuromuscular junctions. 1

WHALER B.C. *see* CEVESE A., GATTULLO D., LOSANO G., MARSH N.A., VACCA G. & WHALER B.C. The cardiovascular effects of gaboon viper venom in the anaesthetized rabbit. 79*P*

WHALER B.C. *see* GHALAYINI Rita, HAWGOOD Barbara J. & WHALER B.C. Arrhythmia induced by timber rattlesnake (*Crotalus horridus horridus*) venom in the isolated rat heart. 80*P*

WHEAL H.V. *see* MCBAIN Anne & WHEAL H.V. Structure activity investigation of the glutamate receptor at the neuro-muscular junction (NMJ) of the hermit crab (*Eupagurus bernhardus*). 52*P*

WHEELER A.K. *see* MACDONALD I.A. & WHEELER A.K. Catecholamine-stimulated thermogenesis in rats with a congenital inability to synthesize vasopressin (Brattleboro strain). 33*P*

WHITEHOUSE B.J. *see* HINSON J.P., PRICE G., PUDNEY J., VINSON G.P. & WHITEHOUSE B.J. Morphological responses to stimulation in the rat adrenal cortex perfused *in situ*. (D) 10*P*

WHITTAM R. *see* BRAND S.C. & WHITTAM R. The effect of furosemide on sodium movements in human red blood cells. 301

WIEDERHOLT M. *see* COHEN B., GIEBISCH G., HANSEN L.L., TEUSCHER U. & WIEDERHOLT M. Relationship between peritubular membrane potential and net fluid reabsorption in the distal renal tubule of *Amphiuma*. 115

WILLIS John S. *see* HALL Andrew C. & WILLIS John S. Differential effects of temperature on three components of passive permeability to potassium in rodent red cells. 629

WILSON S.M. *see* MANN G.E., WILSON S.M. & YUDILEVICH D.L. Substrate transport at the basolateral membrane of the epithelium in the artificially perfused cat submandibular salivary gland. (D) 3*P*

WILSONCROFT P.S. *see* LARGE W.A. & WILSONCROFT P.S. The effect of chloride removal on the electrical and contractile responses of the isolated rat anococcygeus muscle to noradrenaline. 54*P*

WINN H.R. *see* MORII S., NGAI A.L., STRONG A.J. & WINN H.R. Measurement of blood to brain potassium fluxes in hypoxia and hypotension in the rat using ion selective electrodes. 28*P*

WOLF Werner *see* ALBUS Klaus & WOLF Werner Early post-natal development of neuronal function in the kitten's visual cortex: a laminar analysis. 153

WOLFF C.B. *see* NEWSTEAD C.G. & WOLFF C.B. The mean alveolar carbon dioxide tension in man. 76*P*

WOLOWYK M.W. *see* ELLORY J.C., WOLOWYK M.W. & YOUNG J.D. The properties of *p*-chloromercuriphenylsulphonate and *N*-ethylmaleimide inhibition of amino acid transport by human erythrocytes. 59*P*

WOOD K.L. *see* ANDREWS P.L.R. & WOOD K.L. The effects of chemical and mechanical stimuli applied to the gastric antral mucosa on corpus motility in the anaesthetized ferret. 63*P*

WRAY Susan *see* TOFTS P. & WRAY Susan Changes with age of phosphorus metabolites in rat brain, detected by nuclear magnetic resonance (NMR). 26*P*

YOUNG J.D. *see* ELLORY J.C., WOLOWYK M.W. & YOUNG J.D. The properties of *p*-chloromercuriphenylsulphonate and *N*-ethylmaleimide inhibition of amino acid transport by human erythrocytes. 59*P*

YUDILEVICH D.L. *see* MANN G.E. & YUDILEVICH D.L. Rapid transcapillary exchange and unidirectional neuronal uptake of noradrenaline in the perfused rabbit heart. 589

YUDILEVICH D.L. *see* MANN G.E., WILSON S.M. & YUDILEVICH D.L. Substrate transport at the basolateral membrane of the epithelium in the artificially perfused cat submandibular salivary gland. (D) 3*P*

YUDILEVICH D.L. *see* SWEIRY J.H. & YUDILEVICH D.L. Unidirectional choline influx and its inhibition by hemicholinium-3 at maternal and fetal sides of the guinea-pig placenta. 41*P*

ZEKI S. *see* JEN L.S. & ZEKI S. High cytochrome oxidase content of the V5 complex of Macaque monkey visual cortex. 23*P*

# CONTENTS OF VOLUME 348

*March* 1984

BEVAN Stuart & WENDON Linda M.B. A study of the action of tetanus toxin at rat soleus neuromuscular junctions. 1

DURAND Jacques, DURAND-ARCZYNSKA Wanda & VULLIEMIN Pierre Current-induced volume flow across bovine tracheal epithelium: evidence for sodium–water coupling. 19

COLLMAN P.I., GRUNDY D. & SCRATCHERD T. Vagal control of colonic motility in the anaesthetized ferret: evidence for a non-cholinergic excitatory innervation. 35

MÆHLEN Jan & NJÅ Arild Rearrangement of synapses on guinea-pig sympathetic ganglion cells after partial interruption of preganglionic nerve. 43

COHEN M.W., GRESCHNER M. & TUCCI M. *In vivo* development of cholinesterase at a neuromuscular junction in the absence of motor activity in *Xenopus laevis*. 57

BALLANTYNE D. & RICHTER D.W. Post-synaptic inhibition of bulbar inspiratory neurones in the cat. 67

EDWARDS JR, Donald H. & MULLONEY Brian Compartmental models of electrotonic structure and synaptic integration in an identified neurone. 89

COHEN B., GIEBISCH G., HANSEN L.L., TEUSCHER U. & WIEDERHOLT M. Relationship between peritubular membrane potential and net fluid reabsorption in the distal renal tubule of *Amphiuma*. 115

MCCLURKIN J.W. & MARROCCO R.T. Visual cortical input alters spatial tuning in monkey lateral geniculate nucleus cells. 135

ALBUS Klaus & WOLF Werner Early post-natal development of neuronal function in the kitten's visual cortex: a laminar analysis. 153

BYERLY Lou, CHASE P. Bryant & STIMERS Joseph R. Calcium current activation kinetics in neurones of the snail *Lymnaea stagnalis*. 187

BAYLOR S.M., CHANDLER W.K. & MARSHALL M.W. Calcium release and sarcoplasmic reticulum membrane potential in frog skeletal muscle fibres. 209

NEWBERRY N.R. & NICOLL R.A. A bicuculline-resistant inhibitory post-synaptic potential in rat hippocampal pyramidal cells *in vitro*. 239

ISHIDA Andrew T., KANEKO Akimichi & TACHIBANA Masao Responses of solitary retinal horizontal cells from *Carassius auratus* to L-glutamate and related amino acids. 255

KAWAKAMI Masazumi, KIMURA Fukuko & TSAI Cheng-Wei Relationship between the three-hour-period sleep–wakefulness cycle and growth hormone secretion in the immature rat. 271

DRAKE-HOLLAND Angela J., LAIRD John D., NOBLE Mark I.M., SPAAN Jos A.E. & VERGROESEN Isabelle Oxygen and coronary vascular resistance during auto-regulation and metabolic vasodilatation in the dog. 285

BRAND S.C. & WHITTAM R. The effect of furosemide on sodium movements in human red blood cells. 301

EVANS Peter D. A modulatory octopaminergic neurone increases cyclic nucleotide levels in locust skeletal muscle. 307

EVANS Peter D. The role of cyclic nucleotides and calcium in the mediation of the modulatory effects of octopamine on locust skeletal muscle. 325

DIFRANCESCO Dario Characterization of the pace-maker current kinetics in calf Purkinje fibres. 341

HILLS B.A. 'De-watering' capabilities of surfactants in human amniotic fluid. 369

MATTHEWS Peter B.C. Evidence from the use of vibration that the human long-latency stretch reflex depends upon spindle secondary afferents. 383

JACKSON Michael J. Effect of sodium on transport of weak electrolytes across rat jejunum *in vitro*. 417

GIRALDEZ F. Active sodium transport and fluid secretion in the gall-bladder epithelium of *Necturus*. 431

RUCKEBUSCH M. & SUTRA J.F. On the significance of monoamines and their metabolites in the cerebrospinal fluid of the sheep. 457

JACQUIN Mark F., MOONEY Richard D. & RHOADES Robert W. Altered somatosensory receptive fields in hamster colliculus after infraorbital nerve section and xylocaine injection. 471

DRAPEAU Pierre & NACHSHEN Daniel A. Manganese fluxes and manganese-dependent neurotransmitter release in presynaptic nerve endings isolated from rat brain. 493

CLARKE J.D.W., HAYES B.P., HUNT S.P. & ROBERTS Alan Sensory physiology, anatomy and immunohistochemistry of Rohon-Beard neurones in embryos of *Xenopus laevis*. 511

DALE N. & ROBERTS Alan Excitatory amino acid receptors in *Xenopus* embryo spinal cord and their role in the activation of swimming. 527

MATTHEWS Peter B.C. The contrasting stretch reflex responses of the long and short flexor muscles of the human thumb. 545

BURNE J.A., LIPPOLD O.C.J. & PRYOR M. Proprioceptors and normal tremor. 559

EVERED M. D. & ROBINSON M.M. Increased or decreased thirst caused by inhibition of angiotensin-converting enzyme in the rat. 573

MANN G.E. & YUDILEVICH D. L. Rapid transcapillary exchange and unidirectional neuronal uptake of noradrenaline in the perfused rabbit heart. 589

BICKNELL R.J., BROWN D., CHAPMAN C., HANCOCK P.D. & LENG G. Reversible fatigue of stimulus–secretion coupling in the rat neurohypophysis. 601

ATWATER Illani, GONCALVES A., HERCHUELZ A., LEBRUN P., MALAISSE W. J., ROJAS E. & SCOTT Angela Cooling dissociates glucose-induced insulin release from electrical activity and cation fluxes in rodent pancreatic islets. 615

HALL Andrew C. & WILLIS John S. Differential effects of temperature on three components of passive permeability to potassium in rodent red cells. 629

MACLEISH P. R., SCHWARTZ E. A. & TACHIBANA M. Control of the generator current in solitary rods of the *Ambystoma tigrinum* retina. 645

LEDERER W.J. & NELSON M.T. Sodium pump stoicheiometry determined by simultaneous measurements of sodium efflux and membrane current in barnacle. 665

## PROCEEDINGS OF THE PHYSIOLOGICAL SOCIETY

11–12 *November* 1983

*Queen Elizabeth College Meeting*

### DEMONSTRATIONS

*Mann G.E., Munoz M., Pastor Maria-Angeles & Peran S.* Rapid measurements of unidirectional amino acid influx at the basolateral membrane of the epithelium in the intact perfused rat pancreas. 2*P*

*Mann G.E., Wilson S.M. & Yudilevich D.L.* Substrate transport at the basolateral membrane of the epithelium in the artificially perfused cat submandibular salivary gland. 3*P*

*Mina M. & Morrissey Shelagh M.* Effect of Cystic Fibrosis (CF), non-CF serum and pancreotone on the transport and retention of $^{36}Cl$, $^{3}H_2O$ in rat gastrointestinal mucosae. 4*P*

*Mehta J.G. & Morrissey Shelagh M.* Effect of tripotassium dicitrate bismuthate (De-nol) on the $H^+$ ion back diffusion in the guinea pig stomach. 5*P*

*Smith I.C.H.* Modelling paired-tracer dilution measurements of substrate uptake from the microcirculation. 6*P*

*Greenwood J. & Pratt O.E.* A method for the continuous sampling of arterial blood in rats or other small animals. 7*P*

*Hollanders D., Husband Ellen M., Morrissey Shelagh M., Tovey F.I. & Ward P.M.* Histochemistry of gastric mucins in smokers and non-smokers. 8*P*

*Cook J.E. & Rankin Elizabeth C.C.* Use of a lectin to assess the retinotopography of goldfish optic terminals. 9*P*

*Hinson J.P., Price G., Pudney J., Vinson G.P. & Whitehouse B.J.* Morphological responses to stimulation in the rat adrenal cortex perfused *in situ*. 10*P*

*Charmet-Riffaud Ph., Girault Monique & Syrota A.* Characterization of muscarinic cholinergic receptors in the isolated perfused rat heart. 11*P*

*Fry C.H. & Walker J.M.* A numerical method for the calculation of the characteristic time constant of dynamic systems. 12*P*

*Naftalin R.J. & Smith P.M.* A microprocessor based device for the control and measurement of short-circuit current across small intestine. 13*P*

### COMMUNICATIONS

*Brook G., Costa-Jussa F.R., Duchen L.W., Gomez S. & Jacobs J.M.* Necrosis of denervated skeletal muscle in mice fed amiodarone. 14*P*

*Barker D. & Stacey M.J.* Presynaptic features of cat intrafusal motor innervation. 15*P*

*Banks R.W.* On the attachment of elastic fibres in cat tenuissimus muscle spindles. 16*P*

*Bevan S, Gray P.T.A., Rang H.P. & Ritchie J.M.* Calcium-activated ion channels in rat Schwann cells. 17*P*

*Bevan S., Gray P.T.A. & Ritchie J.M.* A high conductance anion-selective channel in rat Schwann cells. 18*P*

*Ashton J., Boddy A. & Donaldson I.M.L.* Interactions, in cat Area 17, between visual and orbital proprioceptive signals. 19*P*

*Cole J.D., Gordon G. & Sanders D.J.* Physiological properties of dorsal column nuclear cells of the cat which project into the spinal cord. 20*P*

*Harrison P.J. & Jankowska E.* Excitation of cat spinocervical tract neurones by corticospinal fibres. 21*P*

*Bloch Susan & Martinoya C.* Binocular convergence but monocular pupilloconstriction to uniocular frontal fixation in pigeons. 22*P*

*Jen L.S. & Zeki S.* High cytochrome oxidase content of the V5 complex of Macaque monkey visual cortex. 23P

*Rostain J.C. & Wardley-Smith Bridget* The role of glycine in the high pressure neurological syndrome in the rat. 24P

*Robertson H.A.* Effects of benzodiazepine antagonists on kindled seizures: evidence for multiple benzodiazepine receptors. 25P

*Tofts P. & Wray Susan* Changes with age of phosphorus metabolites in rat brain, detected by nuclear magnetic resonance (NMR). 26P

*van Heeswijk M.P.E. & van Os C.H.* Hydraulic conductivity of rabbit kidney brush border membrane vesicles. 27P

*Morii S., Ngai A.L., Strong A.J. & Winn H.R.* Measurement of blood to brain potassium fluxes in hypoxia and hypotension in the rat using ion selective electrodes. 28P

*Bradbury M.W., Font C. & Strong A.J.* $^{86}$Rb entry from blood into rat brain during hypotension. 29P

*Cremer J.E. & Day D.E.* The influence of atropine on regional brain blood flow in the rat. 30P

*Deane R. & Jones H.C.* Compliance in the developing cerebrospinal fluid system of the rat. 31P

*Mitchell M.A.* Effects of glucagon on plasma albumin bound non-esterified fatty acids in cold acclimated domestic fowls. 32P

*MacDonald I.A. & Wheeler A.K.* Catecholamine-stimulated thermogenesis in rats with a congenital inability to synthesize vasopressin (Brattleboro strain). 33P

*Ayling J. Hilary, Currie S., Ellis F.R., Halsall P. Jane, Hay Edwina & Ellis Ruth* The influence of surface cooling on body temperature and heat production in patients susceptible to malignant hyperpyrexia. 34P

*Dulloo A.G.* Presence and absence of dietary-induced thermogenesis in two strains of mice fed a high protein, high fat diet. 35P

*Ashworth M., Pollard M. & Rutishauser Sigrid C.B.* Hepatic extraction of amiloride in the guinea-pig: its inhibition by choline. 36P

*Christensen H.N. & Vadgama J.V.* A general convertibility of amino acid transport system ASC. 37P

*van Heeswijk M.P.E. & van Os C.H.* Transport properties of $Na^+/Ca^{2+}$ exchange and ATP-dependent $Ca^{2+}$ transport in basolateral membranes from rat kidney cortex. 38P

*Maruyama Y. & Petersen O.H.* Control of $K^+$ conductance by cholecystokinin and $Ca^{2+}$ in single pig pancreatic acinar cells studied by patch-clamp technique. 39P

*Eddy A.A. & Johnson E.* Effect of ouabain on 2-aminoisobutyrate accumulation by mouse ascites tumour cells in the presence of nigericin. 40P

*Sweiry J.H. & Yudilevich D.L.* Unidirectional choline influx and its inhibition by hemicholinium-3 at maternal and fetal sides of the guinea-pig placenta. 41P

*Hii C.T.S. & Howell S.L.* Effects of epicatechin on cAMP content of isolated rat islets of Langerhans. 42P

*Hedemark Poulsen J., Smaje L.H. & Ussing H.H.* Evidence from $O_2$ uptake measurements for ($Na^+$–$K^+$–$2Cl^-$) co-transport in the rabbit submandibular gland. 43P

*Ellory J.C. & Osotimehin B.* Glutamine uptake in human erythrocytes. 44P

*Alvarado F. & Brot-Laroche E.* Dual mechanisms for intestinal D-glucose and sodium cotransport in brush-border membrane vesicles from guinea-pig jejunum. 45P

*Fuller C.M. & Gallacher D.V.* Beta-adrenergic receptor activation in isolated rat parotid glands: effects of field stimulation, isoprenaline and isobutylmethylxanthine. 46P

*Kaumann A.J. & Lemoine H.* Separation of catecholamine binding and relaxation in bovine tracheal muscle dependent upon cyclic AMP. 47P

*Rowling Pamela J.E. & Sepulveda F.V.* Na–K–ATPase activity and ouabain binding in epithelial cells isolated from the rabbit small intestine. 48P

*Iwatsuki N., Katoh K. & Nishiyama A.* Effects of divalent cations on ACh-evoked membrane potential changes in the ionophore A23187-treated mouse pancreatic acinar cells. 49P

*Bechem M. & Pott L.* K-channels activated by loss of intracellular ATP in guinea-pig atrial cardioballs. 50P

*Bergman C. & Bergman J.* Influence of the membrane potential on electrogenic asparagin responses in amphibian embryonic cells. 51P

*McBain Anne & Wheal H.V.* Structure activity investigation of the glutamate receptor at the neuro-muscular junction (NMJ) of the hermit crab (*Eupagurus bernhardus*). 52P

*Allen D.G., Eisner D.A., Nieman C.J. & Orchard C.H.* The effect of exposure to Na-free solutions on post-rest contractions of ferret ventricular muscle. 53*P*

*Large W.A. & Wilsoncroft P.S.* The effect of chloride removal on the electrical and contractile responses of the isolated rat anococcygeus muscle to noradrenaline. 54*P*

*Leslie G.C. & Part N.J.* The effect of stimulation at 3 Hz on fast and slow skeletal muscle in the rat. 55*P*

*Lloyd Davies E.R.V., Howell S.L. & Tyhurst M.* Cryopreservation of adult rat pancreatic fragments and assessment of post-thaw viability. 56*P*

*Blatchford D.R., Henderson A.J. & Peaker M.* The measurement of functional capacity of the goat mammary gland. 57*P*

*Baillie P. & MacPhail Moira* Rate of food ingestion by lactating rats. 58*P*

*Ellory J.C., Wolowyk M.W. & Young J.D.* The properties of *p*-chloromercuriphenylsulphonate and *N*-ethylmaleimide inhibition of amino acid transport by human erythrocytes. 59*P*

*Bennett T. & Gardiner S.M.* Control of blood pressure during fluid deprivation in rats (Brattlebro strain) with a congenital inability to synthesize vasopressin. 60*P*

*Greenwood J. & Pratt O.E.* The effect of ethanol upon thiamine transport across the blood–brain barrier in the rat. 61*P*

*Cassuto J., Eklund S., Jodal M. & Lundgren O.* On the role of intramural nerves in the intestinal secretion induced by intraluminal dibutyryl cyclic adenosine 3′,5′-monophosphate and theophylline in rats and cats. 62*P*

*Andrews P.L.R. & Wood K.L.* The effects of chemical and mechanical stimuli applied to the gastric antral mucosa on corpus motility in the anaesthetized ferret. 63*P*

*Biedzinski T.M., Devaux M.A., Johnson C.D. & Sarles H.* Enteropancreatic reflexes in the dog: effects of adrenergic blockade. 64*P*

*Gee Jennifer M., Johnson I.T. & Southon Susan* Structural and functional changes in the jejunal mucosa of the zinc-deficient rat. 65*P*

*Garrett J.R., Harrop T.J. & Thulin A.* Factors affecting reflex secretion of parotid acinar granules in rats after chronic sympathectomy. 66*P*

*Brodin E., Ekman R., Ekstrom J., Hakanson R. & Sundler F.* Effect of denervation on substance P and vasoactive intestinal peptide in rat salivary glands. 67*P*

*Johnston Barbara M., Jones C.T., Lagercrantz H., Roebuck Margaret M. & Walker D.W.* A role for the adrenal medulla in the control of peripheral sensitivity to catecholamines in fetal sheep. 68*P*

*Morrissey Shelagh & Ward P.M.* Electrical stimulation of the lateral hypothalamus and gastric secretion in the conscious albino rat. 69*P*

*Parsons B.J., Poat Judith A. & Roberts Penny A.* Effects of protein synthesis inhibitors on noradrenaline stimulated fluid transport by isolated rat jejunum. 70*P*

*Bronk J.R., Humpherson P.G. & Lynch Susan* Absorption of an amino acid mixture during vascular perfusion of rat jejunum. 71*P*

*Gattullo D., Losano G., Marsh N.A. & Vacca G.* Interaction between vascular elasticity and myogenic mechanism in the regulation of mean diastolic coronary resistance in the dog. 72*P*

*Donaldson R.M.* Comparison of the exercise tolerance of patients undergoing fixed rate and rate responsive pacing. 73*P*

*Barker S.J., Castro K., Howe A. & Pack R.J.* Abdominal vagal paraganglia in the rat: hypertrophic response to chronic hypoxia. 74*P*

*Turner S.A.* A study of catecholamine effects on the baroreceptor reflex pathway in the rabbit. 75*P*

*Newstead C.G. & Wolff C.B.* The mean alveolar carbon dioxide tension in man. 76*P*

*Taylor D.E.M.* The genesis of Starling waves in slow hypovolaemia in the dog. 77*P*

*Ballard H.J., Cotterrell D. & Karim F.* Release of adenosine into blood from contracting skeletal muscles in dogs. 78*P*

*Cevese A., Gattullo D., Losano G., Marsh N.A., Vacca G. & Whaler B.C.* The cardiovascular effects of gaboon viper venom in the anaesthetized rabbit. 79*P*

*Ghalayini Rita, Hawgood Barbara J. & Whaler B.C.* Arrhythmia induced by timber rattlesnake (*Crotalus horridus horridus*) venom in the isolated rat heart. 80*P*